

THAT WHICH IS CLAIMED IS:

1. A polyolefin composition having high resistance to degradation comprising:
at least one polyolefin;
bis(2,4-dicumylphenyl)pentaerythritol diphosphite;
5 triisopropanolamine;
a hydrotalcite component, and
at least one phenol component.
2. The polyolefin composition of Claim 1, wherein the at least one polyolefin is
10 the polymerization product of one or more monomers in the presence of a transition metal
halide catalyst comprising a metal halide compound selected from metal dihalides or metal
hydroxyhalides and a transition metal compound.
3. The polyolefin composition of Claim 2, wherein the monomers are selected
15 from olefins, conjugated or non-conjugated diolefins or mixtures thereof.
4. The polyolefin composition of Claim 1, wherein bis(2,4-
dicumylphenyl)pentaerythritol diphosphite is present in the composition in an amount within
a range of about 100 mg/kg to about 5000 mg/kg based on the mass of the polyolefin
20 component without additives.
5. The polyolefin composition of Claim 1, wherein bis(2,4-
dicumylphenyl)pentaerythritol diphosphite is present in the composition in an amount within
a range of about 100 mg/kg to about 2000 mg/kg based on the mass of the polyolefin
25 component without additives.
6. The polyolefin composition of Claim 1, wherein bis(2,4-
dicumylphenyl)pentaerythritol diphosphite is present in the composition in an amount within
a range of about 100 mg/kg to about 1500 mg/kg based on the mass of the polyolefin
30 component without additives.

7. The polyolefin composition of Claim 1, wherein triisopropanolamine is present in the composition in an amount within a range of about 0.5 % by weight to about 3 % by weight based on the mass of the polyolefin component without additives.

8. The polyolefin composition of Claim 1, wherein triisopropanolamine is present in the composition in an amount within a range of about 0.5 % by weight to about 2 % by weight based on the mass of the polyolefin component without additives.

9. The polyolefin composition of Claim 1, wherein the hydrotalcite component is present in the composition in an amount up to about 500 mg/kg based on the mass of the polyolefin component without additives.

10. The polyolefin composition of Claim 1, wherein the hydrotalcite component is present in the composition in an amount within a range of about 10 mg/kg to about 300 mg/kg based on the mass of the polyolefin component without additives.

11. The polyolefin composition of Claim 1, wherein the hydrotalcite component is present in the composition in an amount within a range of about 10 mg/kg to about 150 mg/kg based on the mass of the polyolefin component without additives.

12. The polyolefin composition of Claim 1, wherein the phenol component is present in the composition in an amount up to about 5000 mg/kg based on the mass of the polyolefin component without additives.

13. The polyolefin composition of Claim 1, wherein the phenol component is present in the composition in an amount within a range of about 1 mg/kg to about 2000 mg/kg based on the mass of the polyolefin component without additives.

14. The polyolefin composition of Claim 1, wherein the hydrotalcite components is selected from $Mg_{0.7}Al_{0.3}(OH)_2(CO_3)_{0.15} \cdot 0.54H_2O$, $Mg_{4.5}Al_2(OH)_{13}CO_3 \cdot 3.5H_2O$, $MgCO_3 \cdot 5Mg(OH)_2 \cdot Al(OH)_3 \cdot 4H_2O$, or $Mg_{4.2}Al_2(OH)_{12.4}CO_3$.

15. The polyolefin composition of Claim 1, wherein the phenol component is selected from monophenols, bisphenols, thiobisphenols, polyphenols, hydroxybenzyl aromates, amides of β -(3,5-di-tert-butyl-4-hydroxyphenyl)-propionic acid, esters of β -(3,5-di-tert-butyl-4-hydroxyphenyl)-propionic acid with mono- or polyvalent alcohols, spiro compounds, or mixtures thereof.

16. The polyolefin composition of Claim 1, wherein the phenol component is selected from tetrakis [methylene (3,5-di-tert-butyl-4-hydroxyhydrocinnamate)]methane; 1,3,5-tri-(3,5-di-tert-butyl-4-hydroxybenzyl)-2,4,6-trimethylbenzene; β -(3,5-di-tert-butyl-4-hydroxyphenyl)-propionic acid-n-octadecyl ester; 2,6-di-tert-butyl-4-methylphenol; 3,9-bis-[1,1-dimethyl-2-(3,5-di-tert-butyl-4-hydroxy-phenyl)-ethyl]-2,4,8,10-tetraoxaspiro-[5,5]-undecane, or mixtures thereof.

17. The polyolefin composition of Claim 1, wherein the hydrotalcite component is $\text{MgCO}_3 \cdot 5\text{Mg}(\text{OH})_2 \cdot 2\text{Al}(\text{OH})_3 \cdot 4\text{H}_2\text{O}$.

18. The polyolefin composition of Claim 1, wherein the phenol component is tetrakis [methylene (3,5-di-tert-butyl-4-hydroxyhydrocinnamate)]methane.

19. The polyolefin composition of Claim 1, wherein the olefins are selected from ethylene, propylene, 1-butene, 1-pentene, 4-methyl-1-pentene, 1-hexene, 1-octene or mixtures thereof.

20. The polyolefin composition of Claim 1, wherein the conjugated or non-conjugated diolefins are selected from 1,3-butadiene, isoprene, piperylene, 2,3-dimethyl-1,3-butadiene, 1,4-pentadiene, 1,7-hexadiene or mixtures thereof.